

Engineering Statement

The following engineering statement and attached exhibits have been prepared for **Barrington Traverse City License LLC**, licensee of television station **WPBN-TV** at **Traverse City, Michigan** (Facility ID: 21253) and digital television station **WPBN-DT** also at **Traverse City, Michigan**, and are in support of their response to a formal objection submitted by WOOD License Company, LLC. The formal objection in question was filed in opposition to a Petition for Reconsideration submitted by Barrington.

Under the original Petition for Reconsideration, Barrington respectfully asked that the Commission make changes to the DTV allocation facility for WPBN-DT to be utilized in the post transition environment. In that petition, Barrington proposed utilization of their existing WPBN-TV NTSC facility suitably converted for digital usage. Specifically, the geographic coordinates and elevation data for WPBN-TV would be utilized by the post transition digital television facility as would the currently authorized non-directional antenna. The proposed effective radiated power for this facility would be 0.5 kW.

WOOD has objected to this petition by attempting to demonstrate that the proposed changes to the WPBN-DT allocated facilities would "...create substantial interference to WOOD's post-transition operations..." and result in the loss of digital service to "thousands" of WOOD viewers. WOOD also indicates that the proposed facilities for WPBN-DT will cause more than 0.1 percent unique interference to their post-transition service population. As Barrington will demonstrate in this engineering statement and attached exhibits, the arguments raised by WOOD, their counsel, and engineer are in fact not entirely accurate.

At present, both WOOD-DT and WPBN-TV operate on channel 7. The NTSC operations for WOOD-TV are on channel 8, while the DTV operations for WPBN-DT are on channel 50. Currently, due to the co-channel relationship between the facilities of WOOD-DT and WPBN-TV, a substantial amount of predicted interference under OET-69 guidelines is already present. Exhibit E-1 of this statement contains a map depicting the current areas of predicted interference from the analog WPBN-TV facilities to WOOD-DT. Immediately following this map are tabulations of the interference population for both the 1990 and 2000 Census data.

As the map and tabulations demonstrate, at present a substantial amount of interference is predicted to be occurring to the authorized WOOD-DT facilities from the authorized WPBN-TV NTSC facilities. Specifically WPBN-TV is predicted to cause interference to 5.696 percent of the WOOD-DT population under the 1990 Census and 5.833 percent of the WOOD-DT population under the 2000 Census. Put a different way, of the 14 counties contained within the Grand Rapids-Kalamazoo-Battle Creek DMA, 7 are predicted to currently receive some level of interference from the authorized WPBN-TV facilities. The interference under consideration in this exhibit is unique to WPBN-TV and is exclusive of all other facilities.

In Exhibit E-2, the predicted area of interference from WPBN-DT to WOOD-DT is depicted, with similar tabulations immediately following the map. As the map and tabulations in this exhibit, the area where WOOD-DT would receive interference from WPBN has been dramatically reduced. Under the 1990 Census, the population predicted to receive interference from WPBN has been reduced by 92.96 percent to 8,717 persons from 123,739 persons. This represents 0.401 percent of the population served by WOOD-DT. Under the 2000 Census, a similar situation would occur. In this instance, the population predicted to receive interference would be reduced by 92.22

percent from 139,920 persons to 10,883 persons, which is 0.454 percent of the total population within the WOOD-DT service area.

These two exhibits demonstrate that the facilities proposed under the Petition for Reconsideration comply with both Commission Rules and Commission Procedure on several fronts. Under current Commission Rules, proposed DTV facility modifications are permitted under most circumstances to increase the interference population by no more than 2 percent. The facilities proposed under the Petition would substantially reduce the interference population from nearly 6 percent to under 0.5 percent. Similarly, the proposed change in the Commission Rules to permit an increase in interference of less than 0.5 percent would be met as the proposed allocation facilities would once again significantly reduce the interference received by the licensed WOOD-DT facilities. Finally, under the election process, an increase of no more than 0.1 percent over existing interference levels was permitted. Since the proposed change to the allocation facilities would result in a net reduction in interference, no conflicts with this procedure are evident.

This response to the objection filed by WOOD is of course pertinent to a Petition for Reconsideration relative to the Table of Allotments, which was based on the channel election process. The argument raised by WOOD that the Barrington petition is “speculative” and “premature” is simply not true. Since this petition is relative to the Table of Allotments as issued by the Commission, it is not a proposal to modify post-transition facilities as indicated by WOOD. Furthermore, the argument that the proposed WPBN allocation facilities would create substantial and impermissible unique interference is also inaccurate. As demonstrated so far, the proposed allocation facilities for WPBN-DT would result in significantly less interference to WOOD-DT than is currently experienced, and would comply with all rules and procedures either in effect or proposed.

WOOD argues that a disservice to the public interest would be realized by the proposed change to WPBN-DT allocated facilities due to increased levels of interference. This argument has already been proven to be inaccurate in this engineering statement. The public interest would, however, be served by the continuance of WPBN programming over a larger area, serving a greater population than would be realized by the WPBN-DT allocation facilities. Exhibit E-3 compares the current WPBN-TV Grade B service contour, the WPBN-DT allocation noise limited service contour, and the WPBN-DT proposed allocation noise limited service contour.

At present under the 2000 Census, the resident population within the WPBN-TV Grade B service contour is 499,910 persons. Under the allotment facilities for WPBN-DT, the resident population within the 36 dBu F(50,90) contour is 254,822 persons, while the proposed allocation facilities has a resident population of 295,922 persons within the 36 dBu contour. If the Petition for reconsideration is not granted, then 41,100 fewer persons would be able to receive WPBN-DT programming.

In order for the WPBN-DT noise limited service contour to essentially replicate the Grade B service contour of WPBN-TV, WPBN-DT would have to operate at the current WPBN transmitter site with a maximum effective radiated power of 14.0 kW utilizing the existing non-directional antenna. Even under such a scenario, the level of interference experienced by WOOD-DT would be reduced. As Exhibit E-4 demonstrates, under the 1990 Census, interference is predicted to occur to 4.764 percent of the WOOD-DT service population, while under 2000 Census data, this number decreases further to 4.561 percent. Therefore, it is evident that even were WPBN-DT to replicate its current NTSC Grade B coverage, a net reduction in the level of predicted interference to WOOD-DT would still occur.

Should the Petition for Reconsideration be denied, Barrington would be forced to relocate the current WPBN-TV non-directional antenna to the DTV allocation site. In order to maintain the predicted 36 dBu F(50,90) contour within the allocated contour, a reduction in effective radiated power to 0.30 kW would be required. Such a reduction would result in a population within the 36 dBu F(50,90) service contour of 184,578 persons under the 2000 Census. This would result in a reduction in the served population of 63.1 percent, or 315,332 persons. The resulting coverage would serve a mere 36.9 percent of the resident population within the currently authorized WPBN-TV Grade B service contour. Of the population residing within the resulting WPBN-DT noise limited service contour, 9,105 persons by the 2000 Census would also reside outside the currently authorized WPBN-TV Grade B service contour. Exhibit E-5 compares the allocated DTV service contour for WPBN-DT relative to the resulting reduced service contour and explicitly demonstrates the substantial loss of service that would result.

In conclusion, the revision to the allotment parameters for WPBN-DT would result in no new net interference to WOOD-DT over what is currently being received by that station from WPBN. In reality, as demonstrated, WOOD-DT would have substantially less predicted received interference in the post-transition environment under the revised WPBN-DT allocation facilities than it currently experiences from WPBN. The modification to the WPBN-DT allotment would, however, prevent significant loss of service to the viewership of WPBN, and by this fact would serve the public interest.

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.

A handwritten signature in black ink, appearing to read "Jeremy D. Ruck". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Above signature is digitized copy of actual signature

Jeremy D. Ruck
Consulting Engineer
December 20, 2007

WOOD-D

BLCDT20040625ABO
Latitude: 42-41-14 N
Longitude: 085-30-34 W
ERP: 30.00 kW
Channel: 07
Frequency: 177.0 MHz
AMSL Height: 530.0 m
Elevation: 251.0 m
Horiz. Pattern: Omni

WPBNTV

BLCT1578
Latitude: 44-16-33 N
Longitude: 085-42-49 W
ERP: 316.00 kW
Channel: 07+
Frequency: 177.0 MHz
AMSL Height: 756.0 m
Elevation: 434.0 m
Horiz. Pattern: Omni

D.L. Markley & Associates, Inc.

WOOD-DT 36 dBu
F(50,90) Contour

☒ WOOD-D
■ WPBNTV

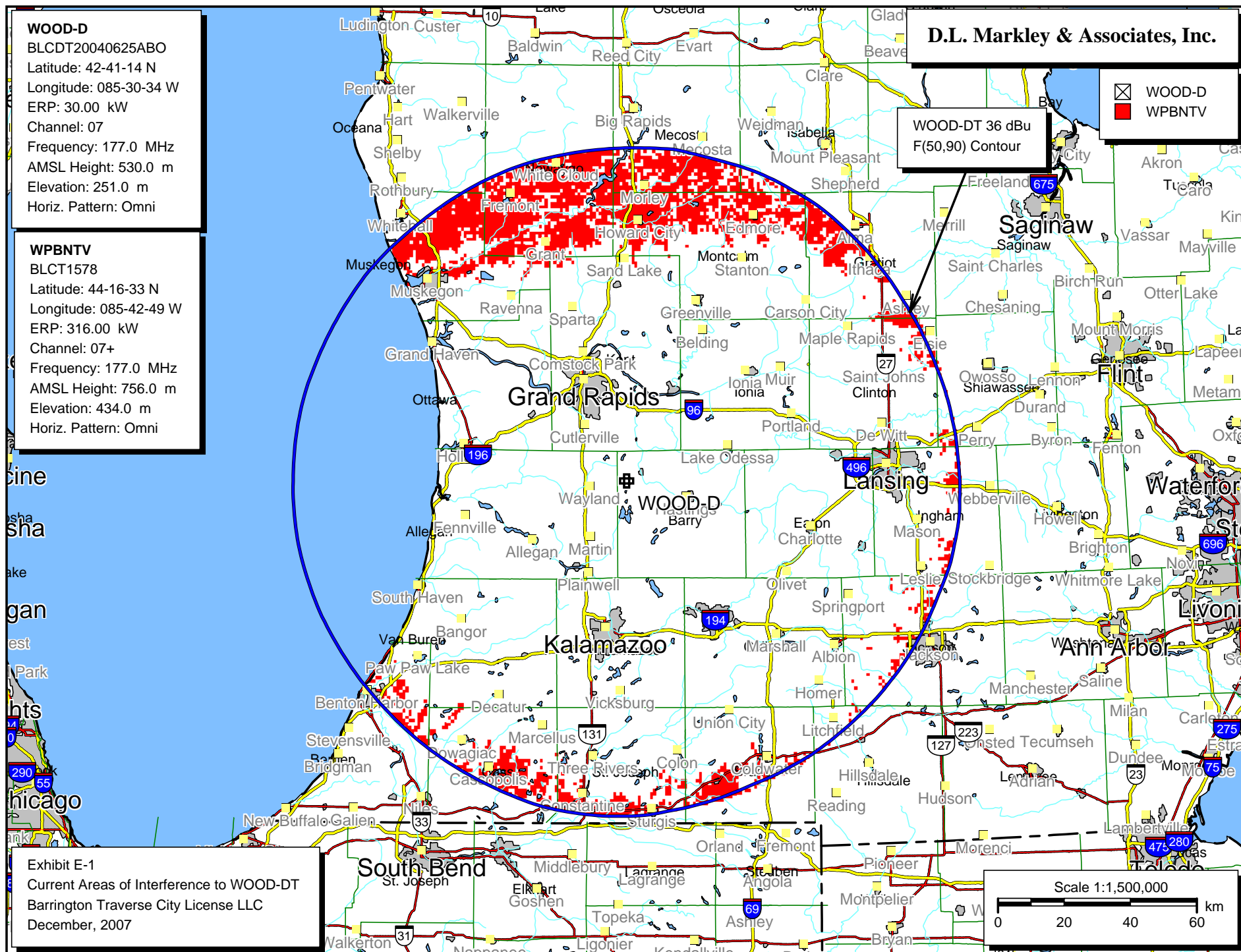


Exhibit E-1
Current Areas of Interference to WOOD-DT
Barrington Traverse City License LLC
December, 2007

D.L. Markley & Associates, Inc. Population Report
Exhibit E-1 - Population Tabulation for 1990 Census

WOOD-D (07) Grand Rapids, MI - BLCDT20040625ABO
Broadcast Type: Digital Service: T
Lat: 42-41-14 N Lng: 085-30-34 W ERP: 30.0 kW AMSL: 530.0 m
TV Incoming Interference Study
Interference Considered Within: Noise Limited FCC Contour
Signal Resolution: 1.0 km
LR Profile Spacing Increment: 0.1 km
Consider NTSC Taboo: Yes
KWX error points are considered to
be interference free coverage.
of radials computed for contours: 72
Contours calculated using 8 radial HAAT.
Threshold for reception: 36.0
Pop Centroid DB: 2000 US Census (SF1)

Study Date: 12/19/2007
TV Database Date: 12/18/2007

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 1990 US Census

Percentages calculated using a baseline population of 2,172,538.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
WPBNTV (07+)	52361	123739	5.696	3691.85

Masking Summary:

Call Letters	Total Interference		Unique Interference	
	Population	%	Population	%
WPBNTV (07+)	123739	5.696	123739	5.696

Call Letters	City	State	Dist	Bear
WPBNTV (07+)	Traverse City	MI	177.3	354.7

Totals for WOOD-D (07)

Calculation Area Population:	2,180,985	(	31505.1 sq. km)
Not Affected by Terrain Loss:	2,172,538	(	31240.4 sq. km)
Total NTSC Interference:	123,739	(	3691.8 sq. km)
DTV Only Interference:	0	(	-0.1 sq. km)
Total DTV Interference:	0	(	0.0 sq. km)

Interfered Population:	123,739	(3691.8 sq. km)
Interference Free:	2,048,799	(27548.6 sq. km)
Percent Interference:	5.70	
Terrain Blocked Population:	8,447	(264.7 sq. km)
Contour Area Population:	2,181,579	

Interference Free Breakdown:

White:	1,815,636	(88.6%)
Black:	140,840	(6.9%)
Hispanic:	58,236	(2.8%)
Indian:	10,557	(0.5%)
Asian:	21,839	(1.1%)
Other:	1,691	(0.1%)
Total:	2,048,799	

	Housing Units	Population	% of County
Michigan			
Allegan County			
County Pop	36,395	90,509	
WOOD-D (07)	36,395	90,509	
Ix Free	36,395	90,509	100.00
Barry County			
County Pop	20,887	50,057	
WOOD-D (07)	20,887	50,057	
Ix Free	20,887	50,057	100.00
Berrien County			
County Pop	69,532	161,378	
WOOD-D (07)	14,890	34,598	
WPBNTV (07+)	4,080	10,290	29.74
Ix Free	10,810	24,308	70.26
Branch County			
County Pop	18,449	41,502	
WOOD-D (07)	13,594	33,901	
WPBNTV (07+)	2,248	5,439	16.04
Ix Free	11,346	28,462	83.96
Calhoun County			
County Pop	55,619	135,982	
WOOD-D (07)	55,619	135,982	
Ix Free	55,619	135,982	100.00
Cass County			
County Pop	22,644	49,477	
WOOD-D (07)	12,811	25,870	

WPBNTV (07+)	3,354	5,514	21.31
Ix Free	9,457	20,356	78.69
Clinton County			
County Pop	20,959	57,883	
WOOD-D (07)	20,335	56,256	
WPBNTV (07+)	847	2,317	4.12
Ix Free	19,488	53,939	95.88
Eaton County			
County Pop	35,517	92,879	
WOOD-D (07)	35,517	92,879	
Ix Free	35,517	92,879	100.00
Gratiot County			
County Pop	14,699	38,982	
WOOD-D (07)	4,759	12,731	
WPBNTV (07+)	1,822	4,892	38.43
Ix Free	2,937	7,839	61.57
Hillsdale County			
County Pop	18,547	43,431	
WOOD-D (07)	1,170	2,968	
WPBNTV (07+)	46	128	4.31
Ix Free	1,124	2,840	95.69
Ingham County			
County Pop	108,542	281,912	
WOOD-D (07)	103,645	268,027	
WPBNTV (07+)	1,293	3,240	1.21
Ix Free	102,352	264,787	98.79
Ionia County			
County Pop	19,674	57,024	
WOOD-D (07)	19,674	57,024	
Ix Free	19,674	57,024	100.00
Isabella County			
County Pop	19,950	54,624	
WOOD-D (07)	222	592	
WPBNTV (07+)	161	464	78.38
Ix Free	61	128	21.62
Jackson County			
County Pop	57,979	149,756	
WOOD-D (07)	13,429	34,594	
WPBNTV (07+)	2,316	6,077	17.57
Ix Free	11,113	28,517	82.43
Kalamazoo County			
County Pop	88,955	223,411	
WOOD-D (07)	88,955	223,411	
Ix Free	88,955	223,411	100.00
Kent County			
County Pop	192,698	500,631	
WOOD-D (07)	192,698	500,631	
WPBNTV (07+)	64	209	0.04
Ix Free	192,634	500,422	99.96
Mecosta County			
County Pop	17,274	37,308	
WOOD-D (07)	2,334	5,519	

WPBNTV (07+)	1,732	4,088	74.07
Ix Free	602	1,431	25.93
Montcalm County			
County Pop	22,817	53,059	
WOOD-D (07)	22,581	52,662	
WPBNTV (07+)	6,033	13,402	25.45
Ix Free	16,548	39,260	74.55
Muskegon County			
County Pop	61,962	158,983	
WOOD-D (07)	56,638	146,733	
WPBNTV (07+)	12,377	31,602	21.54
Ix Free	44,261	115,131	78.46
Newaygo County			
County Pop	20,105	38,202	
WOOD-D (07)	14,389	30,161	
WPBNTV (07+)	10,432	22,479	74.53
Ix Free	3,957	7,682	25.47
Oceana County			
County Pop	12,857	22,454	
WOOD-D (07)	49	147	
WPBNTV (07+)	49	147	100.00
Ottawa County			
County Pop	66,624	187,768	
WOOD-D (07)	66,624	187,768	
Ix Free	66,624	187,768	100.00
St. Joseph County			
County Pop	24,242	58,913	
WOOD-D (07)	22,342	54,435	
WPBNTV (07+)	5,316	12,930	23.75
Ix Free	17,026	41,505	76.25
Shiawassee County			
County Pop	25,833	69,770	
WOOD-D (07)	1,778	5,023	
WPBNTV (07+)	182	506	10.07
Ix Free	1,596	4,517	89.93
Van Buren County			
County Pop	31,530	70,060	
WOOD-D (07)	31,530	70,060	
WPBNTV (07+)	9	15	0.02
Ix Free	31,521	70,045	99.98

D.L. Markley & Associates, Inc. Population Report
Exhibit E-1 - Population Tabulation for 2000 Census

WOOD-D (07) Grand Rapids, MI - BLCDT20040625ABO
Broadcast Type: Digital Service: T
Lat: 42-41-14 N Lng: 085-30-34 W ERP: 30.0 kW AMSL: 530.0 m
TV Incoming Interference Study
Interference Considered Within: Noise Limited FCC Contour
Signal Resolution: 1.0 km
LR Profile Spacing Increment: 0.1 km
Consider NTSC Taboo: Yes
KWX error points are considered to
be interference free coverage.
of radials computed for contours: 72
Contours calculated using 8 radial HAAT.
Threshold for reception: 36.0
Pop Centroid DB: 2000 US Census (SF1)

Study Date: 12/19/2007
TV Database Date: 12/18/2007

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 2,398,686.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
WPBNTV (07+)	59090	139920	5.833	3691.85

Masking Summary:

Call Letters	Total Interference		Unique Interference	
	Population	%	Population	%
WPBNTV (07+)	139920	5.833	139920	5.833

Call Letters	City	State	Dist	Bear
WPBNTV (07+)	Traverse City	MI	177.3	354.7

Totals for WOOD-D (07)

Calculation Area Population:	2,408,443	(	31505.1 sq. km)
Not Affected by Terrain Loss:	2,398,686	(	31240.4 sq. km)
Total NTSC Interference:	139,920	(	3691.8 sq. km)
DTV Only Interference:	0	(	-0.1 sq. km)
Total DTV Interference:	0	(	0.0 sq. km)

Interfered Population:	139,920	(3691.8 sq. km)
Interference Free:	2,258,766	(27548.6 sq. km)
Percent Interference:	5.83	
Terrain Blocked Population:	9,757	(264.7 sq. km)
Contour Area Population:	2,409,066	

Interference Free Breakdown:

White:	1,897,031	(84.0%)
Black:	164,122	(7.3%)
Hispanic:	113,297	(5.0%)
Native American:	10,475	(0.5%)
Asian:	35,618	(1.6%)
Pacific Islander:	589	(0.0%)
Mixed Race:	35,031	(1.6%)
Other:	2,603	(0.1%)
Total:	2,258,766	

	Housing Units	Population	% of County
Michigan			
Allegan County			
County Pop	43,292	105,665	
WOOD-D (07)	43,292	105,665	
WPBNTV (07+)	0	0	0.00
Ix Free	43,292	105,665	100.00
Barry County			
County Pop	23,876	56,755	
WOOD-D (07)	23,876	56,755	
Ix Free	23,876	56,755	100.00
Berrien County			
County Pop	73,445	162,453	
WOOD-D (07)	15,454	34,401	
WPBNTV (07+)	3,853	9,035	26.26
Ix Free	11,601	25,366	73.74
Branch County			
County Pop	19,822	45,787	
WOOD-D (07)	14,709	37,101	
WPBNTV (07+)	2,331	5,773	15.56
Ix Free	12,378	31,328	84.44
Calhoun County			
County Pop	58,691	137,985	
WOOD-D (07)	58,691	137,985	
Ix Free	58,691	137,985	100.00

Cass County			
County Pop	23,884	51,104	
WOOD-D (07)	13,053	26,477	
WPBNTV (07+)	3,330	5,872	22.18
Ix Free	9,723	20,605	77.82
Clinton County			
County Pop	24,630	64,753	
WOOD-D (07)	23,954	63,064	
WPBNTV (07+)	909	2,453	3.89
Ix Free	23,045	60,611	96.11
Eaton County			
County Pop	42,118	103,655	
WOOD-D (07)	42,118	103,655	
Ix Free	42,118	103,655	100.00
Gratiot County			
County Pop	15,516	42,285	
WOOD-D (07)	5,145	13,107	
WPBNTV (07+)	1,917	4,806	36.67
Ix Free	3,228	8,301	63.33
Hillsdale County			
County Pop	20,189	46,527	
WOOD-D (07)	1,226	3,075	
WPBNTV (07+)	54	151	4.91
Ix Free	1,172	2,924	95.09
Ingham County			
County Pop	115,056	279,320	
WOOD-D (07)	109,331	264,032	
WPBNTV (07+)	1,631	4,071	1.54
Ix Free	107,700	259,961	98.46
Ionia County			
County Pop	22,006	61,518	
WOOD-D (07)	22,006	61,518	
Ix Free	22,006	61,518	100.00
Isabella County			
County Pop	24,528	63,351	
WOOD-D (07)	227	572	
WPBNTV (07+)	163	440	76.92
Ix Free	64	132	23.08
Jackson County			
County Pop	62,906	158,422	
WOOD-D (07)	15,534	39,281	
WPBNTV (07+)	2,710	6,660	16.95
Ix Free	12,824	32,621	83.05
Kalamazoo County			
County Pop	99,250	238,603	
WOOD-D (07)	99,250	238,603	
Ix Free	99,250	238,603	100.00
Kent County			
County Pop	224,000	574,335	
WOOD-D (07)	224,000	574,335	
WPBNTV (07+)	104	328	0.06
Ix Free	223,896	574,007	99.94

Mecosta County			
County Pop	19,593	40,553	
WOOD-D (07)	3,037	6,951	
WPBNTV (07+)	2,224	4,967	71.46
Ix Free	813	1,984	28.54
Montcalm County			
County Pop	25,900	61,266	
WOOD-D (07)	25,718	60,870	
WPBNTV (07+)	7,411	17,149	28.17
Ix Free	18,307	43,721	71.83
Muskegon County			
County Pop	68,556	170,200	
WOOD-D (07)	62,308	156,471	
WPBNTV (07+)	14,462	36,157	23.11
Ix Free	47,846	120,314	76.89
Newaygo County			
County Pop	23,202	47,874	
WOOD-D (07)	16,511	37,375	
WPBNTV (07+)	12,155	28,013	74.95
Ix Free	4,356	9,362	25.05
Oceana County			
County Pop	15,009	26,873	
WOOD-D (07)	44	157	
WPBNTV (07+)	44	157	100.00
Ix Free	0	0	0.00
Ottawa County			
County Pop	86,856	238,314	
WOOD-D (07)	86,856	238,314	
WPBNTV (07+)	0	0	0.00
Ix Free	86,856	238,314	100.00
St. Joseph County			
County Pop	26,503	62,422	
WOOD-D (07)	24,165	57,025	
WPBNTV (07+)	5,537	13,222	23.19
Ix Free	18,628	43,803	76.81
Shiawassee County			
County Pop	29,087	71,687	
WOOD-D (07)	2,126	5,634	
WPBNTV (07+)	251	659	11.70
Ix Free	1,875	4,975	88.30
Van Buren County			
County Pop	33,975	76,263	
WOOD-D (07)	33,975	76,263	
WPBNTV (07+)	4	7	0.01
Ix Free	33,971	76,256	99.99

WOOD-D

BLCDDT20040625ABO
Latitude: 42-41-14 N
Longitude: 085-30-34 W
ERP: 30.00 kW
Channel: 07
Frequency: 177.0 MHz
AMSL Height: 530.0 m
Elevation: 251.0 m
Horiz. Pattern: Omni

WPBN-DT.PRO

Latitude: 44-16-33 N
Longitude: 085-42-49 W
ERP: 0.50 kW
Channel: 7
Frequency: 177.0 MHz
AMSL Height: 756.0 m
Elevation: 434.0 m
Horiz. Pattern: Omni

Exhibit E-2

Interference Areas to WOOD-DT from
Proposed WPBN-DT Facilities
Barrington Traverse City License LLC
December, 2007

D.L. Markley & Associates, Inc.

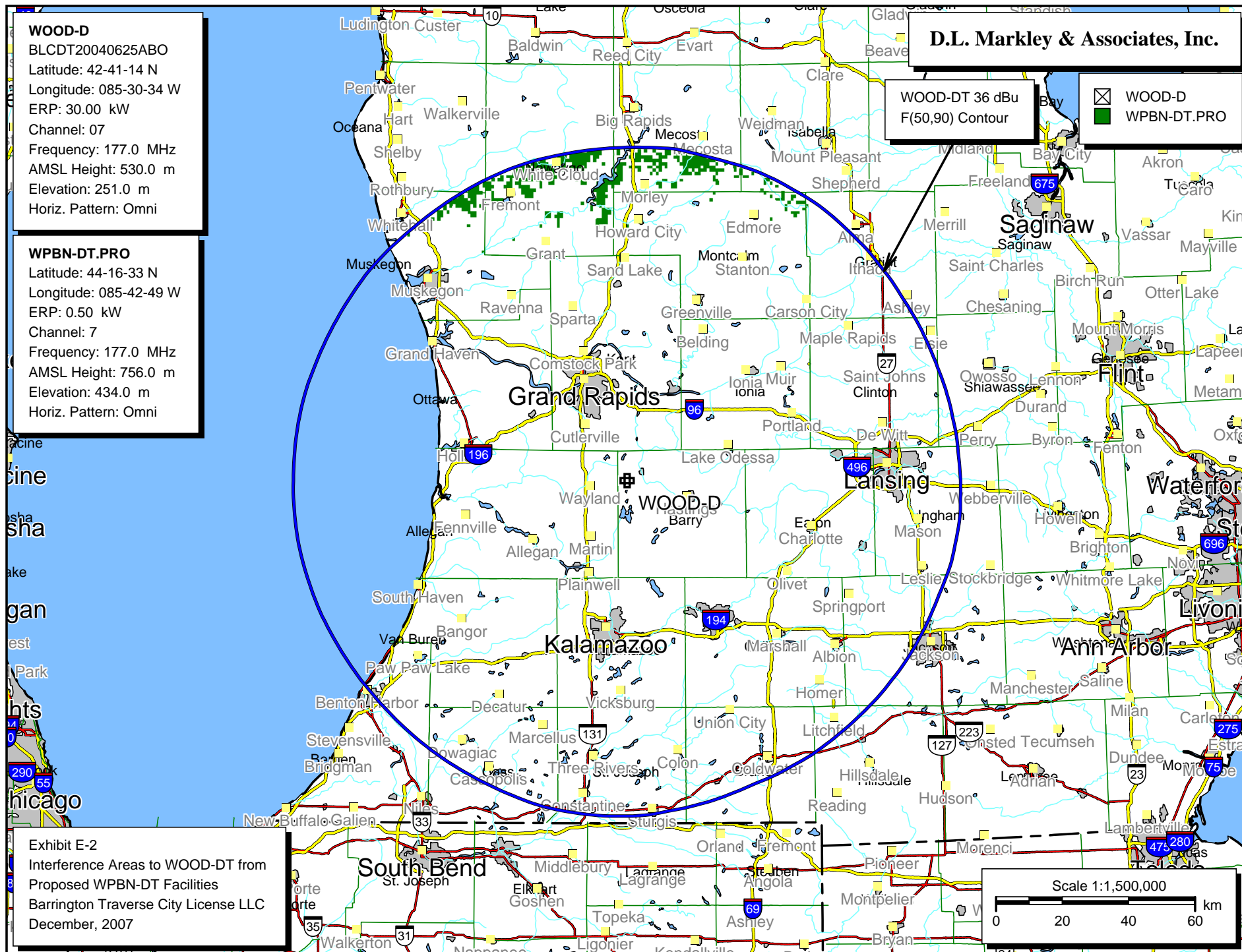
WOOD-DT 36 dBu
F(50,90) Contour



WOOD-D



WPBN-DT.PRO



D.L. Markley & Associates, Inc. Population Report
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Broadcast Type: Digital Service: T
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Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 1990 US Census

Percentages calculated using a baseline population of 2,172,538.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
WPBN-DT.PRO (7)	4029	8717	0.401	432.21

Masking Summary:

Call Letters	Total Interference Population	%	Unique Interference Population	%
WPBN-DT.PRO (7)	8717	0.401	8717	0.401

Call Letters	City	State	Dist	Bear
WPBN-DT.PRO (7)	Traverse City	MI	177.3	354.7

Totals for WOOD-D (07)

Calculation Area Population:	2,180,985	(	31505.1 sq. km)
Not Affected by Terrain Loss:	2,172,538	(	31240.4 sq. km)
Total NTSC Interference:	0	(	0.0 sq. km)
DTV Only Interference:	8,717	(	432.2 sq. km)
Total DTV Interference:	8,717	(	432.2 sq. km)

Interfered Population:	8,717	(	432.2 sq. km)
Interference Free:	2,163,821	(	30808.2 sq. km)
Percent Interference:	0.40		
Terrain Blocked Population:	8,447	(	264.7 sq. km)
Contour Area Population:	2,181,579		

Interference Free Breakdown:

White:	1,917,359	(	88.6%)
Black:	150,806	(	7.0%)
Hispanic:	60,391	(	2.8%)
Indian:	11,314	(	0.5%)
Asian:	22,186	(	1.0%)
Other:	1,765	(	0.1%)
Total:	2,163,821		

	Housing Units	Population	% of County
Michigan			
Allegan County			
County Pop	36,395	90,509	
WOOD-D (07)	36,395	90,509	
Ix Free	36,395	90,509	100.00
Barry County			
County Pop	20,887	50,057	
WOOD-D (07)	20,887	50,057	
Ix Free	20,887	50,057	100.00
Berrien County			
County Pop	69,532	161,378	
WOOD-D (07)	14,890	34,598	
Ix Free	14,890	34,598	100.00
Branch County			
County Pop	18,449	41,502	
WOOD-D (07)	13,594	33,901	
Ix Free	13,594	33,901	100.00
Calhoun County			
County Pop	55,619	135,982	
WOOD-D (07)	55,619	135,982	
Ix Free	55,619	135,982	100.00
Cass County			
County Pop	22,644	49,477	
WOOD-D (07)	12,811	25,870	
Ix Free	12,811	25,870	100.00
Clinton County			

County Pop	20,959	57,883	
WOOD-D (07)	20,335	56,256	
Ix Free	20,335	56,256	100.00
Eaton County			
County Pop	35,517	92,879	
WOOD-D (07)	35,517	92,879	
Ix Free	35,517	92,879	100.00
Gratiot County			
County Pop	14,699	38,982	
WOOD-D (07)	4,759	12,731	
WPBN-DT.PRO (7)	3	8	0.06
Ix Free	4,756	12,723	99.94
Hillsdale County			
County Pop	18,547	43,431	
WOOD-D (07)	1,170	2,968	
Ix Free	1,170	2,968	100.00
Ingham County			
County Pop	108,542	281,912	
WOOD-D (07)	103,645	268,027	
Ix Free	103,645	268,027	100.00
Ionia County			
County Pop	19,674	57,024	
WOOD-D (07)	19,674	57,024	
Ix Free	19,674	57,024	100.00
Isabella County			
County Pop	19,950	54,624	
WOOD-D (07)	222	592	
WPBN-DT.PRO (7)	82	247	41.72
Ix Free	140	345	58.28
Jackson County			
County Pop	57,979	149,756	
WOOD-D (07)	13,429	34,594	
Ix Free	13,429	34,594	100.00
Kalamazoo County			
County Pop	88,955	223,411	
WOOD-D (07)	88,955	223,411	
Ix Free	88,955	223,411	100.00
Kent County			
County Pop	192,698	500,631	
WOOD-D (07)	192,698	500,631	
Ix Free	192,698	500,631	100.00
Mecosta County			
County Pop	17,274	37,308	
WOOD-D (07)	2,334	5,519	
WPBN-DT.PRO (7)	846	1,829	33.14
Ix Free	1,488	3,690	66.86
Montcalm County			
County Pop	22,817	53,059	
WOOD-D (07)	22,581	52,662	
WPBN-DT.PRO (7)	262	689	1.31
Ix Free	22,319	51,973	98.69
Muskegon County			

County Pop	61,962	158,983	
WOOD-D (07)	56,638	146,733	
WPBN-DT.PRO (7)	267	771	0.53
Ix Free	56,371	145,962	99.47
Newaygo County			
County Pop	20,105	38,202	
WOOD-D (07)	14,389	30,161	
WPBN-DT.PRO (7)	2,520	5,026	16.66
Ix Free	11,869	25,135	83.34
Oceana County			
County Pop	12,857	22,454	
WOOD-D (07)	49	147	
WPBN-DT.PRO (7)	49	147	100.00
Ottawa County			
County Pop	66,624	187,768	
WOOD-D (07)	66,624	187,768	
Ix Free	66,624	187,768	100.00
St. Joseph County			
County Pop	24,242	58,913	
WOOD-D (07)	22,342	54,435	
Ix Free	22,342	54,435	100.00
Shiawassee County			
County Pop	25,833	69,770	
WOOD-D (07)	1,778	5,023	
Ix Free	1,778	5,023	100.00
Van Buren County			
County Pop	31,530	70,060	
WOOD-D (07)	31,530	70,060	
Ix Free	31,530	70,060	100.00

D.L. Markley & Associates, Inc. Population Report
Exhibit E-2 - Population Tabulation for 2000 Census

WOOD-D (07) Grand Rapids, MI - BLCDT20040625ABO
Broadcast Type: Digital Service: T
Lat: 42-41-14 N Lng: 085-30-34 W ERP: 30.0 kW AMSL: 530.0 m
TV Incoming Interference Study
Interference Considered Within: Noise Limited FCC Contour
Signal Resolution: 1.0 km
LR Profile Spacing Increment: 0.1 km
Consider NTSC Taboo: Yes
KWX error points are considered to
be interference free coverage.
of radials computed for contours: 72
Contours calculated using 8 radial HAAT.
Threshold for reception: 36.0
Pop Centroid DB: 2000 US Census (SF1)

Study Date: 12/19/2007
TV Database Date: 12/18/2007

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 2,398,686.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
WPBN-DT.PRO (7)	4965	10883	0.454	432.21

Masking Summary:

Call Letters	Total Interference Population	%	Unique Interference Population	%
WPBN-DT.PRO (7)	10883	0.454	10883	0.454

Call Letters	City	State	Dist	Bear
WPBN-DT.PRO (7)	Traverse City	MI	177.3	354.7

Totals for WOOD-D (07)

Calculation Area Population:	2,408,443	(	31505.1 sq. km)
Not Affected by Terrain Loss:	2,398,686	(	31240.4 sq. km)
Total NTSC Interference:	0	(	0.0 sq. km)
DTV Only Interference:	10,883	(	432.2 sq. km)
Total DTV Interference:	10,883	(	432.2 sq. km)

Interfered Population:	10,883	(432.2 sq. km)
Interference Free:	2,387,803	(30808.2 sq. km)
Percent Interference:	0.45	
Terrain Blocked Population:	9,757	(264.7 sq. km)
Contour Area Population:	2,409,066	

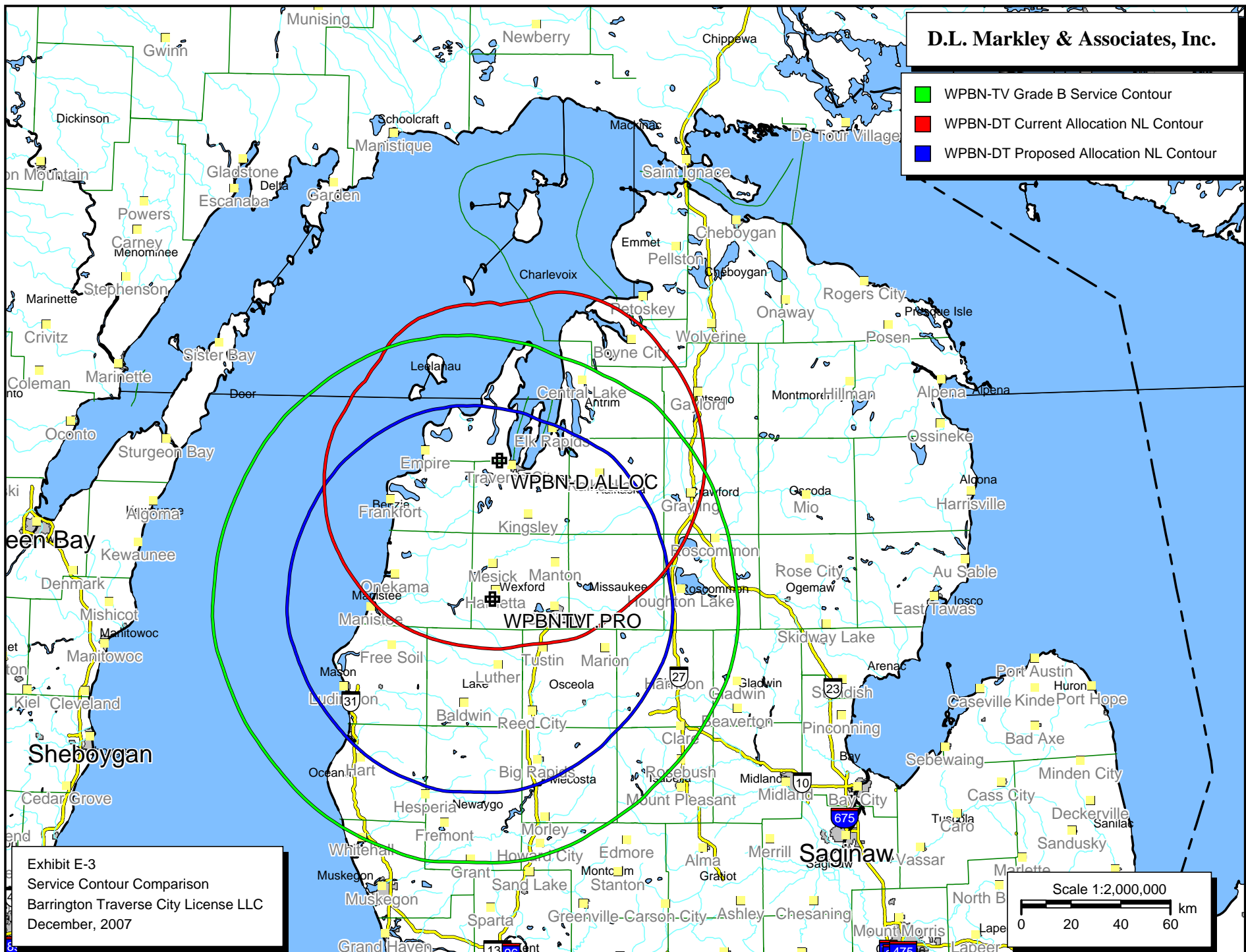
Interference Free Breakdown:

White:	2,008,870	(84.1%)
Black:	173,478	(7.3%)
Hispanic:	117,976	(4.9%)
Native American:	11,229	(0.5%)
Asian:	36,130	(1.5%)
Pacific Islander:	606	(0.0%)
Mixed Race:	36,790	(1.5%)
Other:	2,724	(0.1%)
Total:	2,387,803	

	Housing Units	Population	% of County
Michigan			
Allegan County			
County Pop	43,292	105,665	
WOOD-D (07)	43,292	105,665	
Ix Free	43,292	105,665	100.00
Barry County			
County Pop	23,876	56,755	
WOOD-D (07)	23,876	56,755	
Ix Free	23,876	56,755	100.00
Berrien County			
County Pop	73,445	162,453	
WOOD-D (07)	15,454	34,401	
Ix Free	15,454	34,401	100.00
Branch County			
County Pop	19,822	45,787	
WOOD-D (07)	14,709	37,101	
Ix Free	14,709	37,101	100.00
Calhoun County			
County Pop	58,691	137,985	
WOOD-D (07)	58,691	137,985	
Ix Free	58,691	137,985	100.00
Cass County			
County Pop	23,884	51,104	
WOOD-D (07)	13,053	26,477	

Ix Free	13,053	26,477	100.00
Clinton County			
County Pop	24,630	64,753	
WOOD-D (07)	23,954	63,064	
Ix Free	23,954	63,064	100.00
Eaton County			
County Pop	42,118	103,655	
WOOD-D (07)	42,118	103,655	
Ix Free	42,118	103,655	100.00
Gratiot County			
County Pop	15,516	42,285	
WOOD-D (07)	5,145	13,107	
WPBN-DT.PRO (7)	3	10	0.08
Ix Free	5,142	13,097	99.92
Hillsdale County			
County Pop	20,189	46,527	
WOOD-D (07)	1,226	3,075	
Ix Free	1,226	3,075	100.00
Ingham County			
County Pop	115,056	279,320	
WOOD-D (07)	109,331	264,032	
Ix Free	109,331	264,032	100.00
Ionia County			
County Pop	22,006	61,518	
WOOD-D (07)	22,006	61,518	
Ix Free	22,006	61,518	100.00
Isabella County			
County Pop	24,528	63,351	
WOOD-D (07)	227	572	
WPBN-DT.PRO (7)	71	191	33.39
Ix Free	156	381	66.61
Jackson County			
County Pop	62,906	158,422	
WOOD-D (07)	15,534	39,281	
Ix Free	15,534	39,281	100.00
Kalamazoo County			
County Pop	99,250	238,603	
WOOD-D (07)	99,250	238,603	
Ix Free	99,250	238,603	100.00
Kent County			
County Pop	224,000	574,335	
WOOD-D (07)	224,000	574,335	
Ix Free	224,000	574,335	100.00
Mecosta County			
County Pop	19,593	40,553	
WOOD-D (07)	3,037	6,951	
WPBN-DT.PRO (7)	1,151	2,344	33.72
Ix Free	1,886	4,607	66.28
Montcalm County			
County Pop	25,900	61,266	
WOOD-D (07)	25,718	60,870	
WPBN-DT.PRO (7)	278	746	1.23

Ix Free	25,440	60,124	98.77
Muskegon County			
County Pop	68,556	170,200	
WOOD-D (07)	62,308	156,471	
WPBN-DT.PRO (7)	323	877	0.56
Ix Free	61,985	155,594	99.44
Newaygo County			
County Pop	23,202	47,874	
WOOD-D (07)	16,511	37,375	
WPBN-DT.PRO (7)	3,095	6,558	17.55
Ix Free	13,416	30,817	82.45
Oceana County			
County Pop	15,009	26,873	
WOOD-D (07)	44	157	
WPBN-DT.PRO (7)	44	157	100.00
Ix Free	0	0	0.00
Ottawa County			
County Pop	86,856	238,314	
WOOD-D (07)	86,856	238,314	
Ix Free	86,856	238,314	100.00
St. Joseph County			
County Pop	26,503	62,422	
WOOD-D (07)	24,165	57,025	
Ix Free	24,165	57,025	100.00
Shiawassee County			
County Pop	29,087	71,687	
WOOD-D (07)	2,126	5,634	
Ix Free	2,126	5,634	100.00
Van Buren County			
County Pop	33,975	76,263	
WOOD-D (07)	33,975	76,263	
Ix Free	33,975	76,263	100.00



WOOD-D

BLCDDT20040625ABO
Latitude: 42-41-14 N
Longitude: 085-30-34 W
ERP: 30.00 kW
Channel: 07
Frequency: 177.0 MHz
AMSL Height: 530.0 m
Elevation: 251.0 m
Horiz. Pattern: Omni

WPBN-DT.REP

Latitude: 44-16-33 N
Longitude: 085-42-49 W
ERP: 14.00 kW
Channel: 7
Frequency: 177.0 MHz
AMSL Height: 756.0 m
Elevation: 434.0 m
Horiz. Pattern: Omni

Exhibit E-4

Interference Areas to WOOD-DT from
WPBN-DT Facilities Replicating WPBN-TV
Barrington Traverse City License LLC
December, 2007

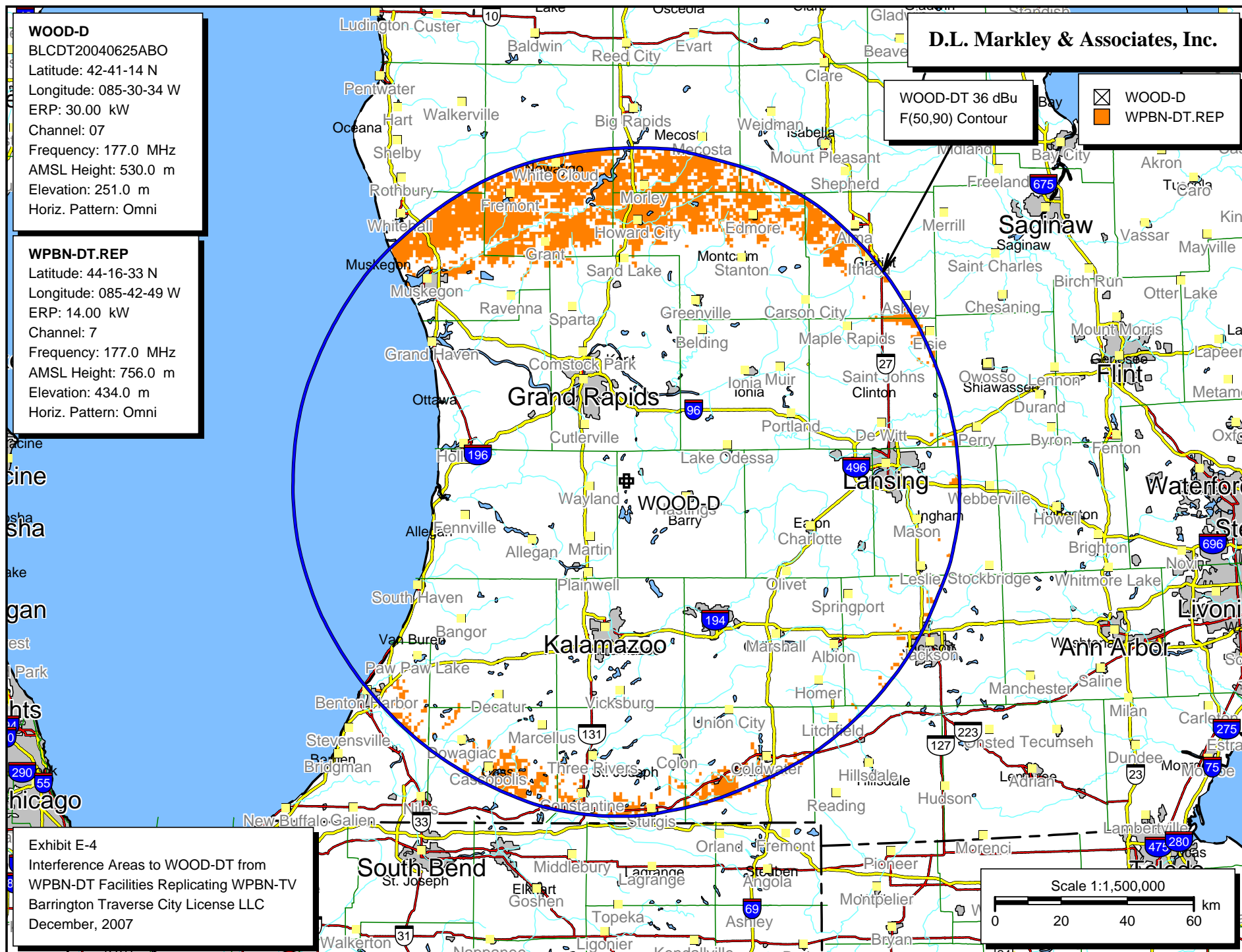
D.L. Markley & Associates, Inc.

WOOD-DT 36 dBu
F(50,90) Contour

☒ WOOD-D
☐ WPBN-DT.REP

Scale 1:1,500,000

0 20 40 60 km



D.L. Markley & Associates, Inc. Population Report
Exhibit E-4 - Population Tabulation for 1990 Census

WOOD-D (07) Grand Rapids, MI - BLCDT20040625ABO
Broadcast Type: Digital Service: T
Lat: 42-41-14 N Lng: 085-30-34 W ERP: 30.0 kW AMSL: 530.0 m
TV Incoming Interference Study
Interference Considered Within: Noise Limited FCC Contour
Signal Resolution: 1.0 km
LR Profile Spacing Increment: 0.1 km
Consider NTSC Taboo: Yes
KWX error points are considered to
be interference free coverage.
of radials computed for contours: 72
Contours calculated using 8 radial HAAT.
Threshold for reception: 36.0
Pop Centroid DB: 2000 US Census (SF1)

Study Date: 12/19/2007
TV Database Date: 12/18/2007

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 1990 US Census

Percentages calculated using a baseline population of 2,172,538.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
WPBN-DT.REP (7)	42476	99081	4.561	3192.33

Masking Summary:

Call Letters	Total Interference		Unique Interference	
	Population	%	Population	%
WPBN-DT.REP (7)	99081	4.561	99081	4.561

Call Letters	City	State	Dist	Bear
WPBN-DT.REP (7)	Traverse City	MI	177.3	354.7

Totals for WOOD-D (07)

Calculation Area Population:	2,180,985	(	31505.1 sq. km)
Not Affected by Terrain Loss:	2,172,538	(	31240.4 sq. km)
Total NTSC Interference:	0	(	0.0 sq. km)
DTV Only Interference:	99,081	(	3192.3 sq. km)
Total DTV Interference:	99,081	(	3192.3 sq. km)

Interfered Population:	99,081	(3192.3 sq. km)
Interference Free:	2,073,457	(28048.1 sq. km)
Percent Interference:	4.56	
Terrain Blocked Population:	8,447	(264.7 sq. km)
Contour Area Population:	2,181,579	

Interference Free Breakdown:

White:	1,837,587	(88.6%)
Black:	142,781	(6.9%)
Hispanic:	58,756	(2.8%)
Indian:	10,702	(0.5%)
Asian:	21,929	(1.1%)
Other:	1,702	(0.1%)
Total:	2,073,457	

	Housing Units	Population	% of County
Michigan			
Allegan County			
County Pop	36,395	90,509	
WOOD-D (07)	36,395	90,509	
Ix Free	36,395	90,509	100.00
Barry County			
County Pop	20,887	50,057	
WOOD-D (07)	20,887	50,057	
Ix Free	20,887	50,057	100.00
Berrien County			
County Pop	69,532	161,378	
WOOD-D (07)	14,890	34,598	
WPBN-DT.REP (7)	3,020	7,587	21.93
Ix Free	11,870	27,011	78.07
Branch County			
County Pop	18,449	41,502	
WOOD-D (07)	13,594	33,901	
WPBN-DT.REP (7)	1,685	4,041	11.92
Ix Free	11,909	29,860	88.08
Calhoun County			
County Pop	55,619	135,982	
WOOD-D (07)	55,619	135,982	
Ix Free	55,619	135,982	100.00
Cass County			
County Pop	22,644	49,477	
WOOD-D (07)	12,811	25,870	

WPBN-DT.REP (7)	2,703	4,467	17.27
Ix Free	10,108	21,403	82.73
Clinton County			
County Pop	20,959	57,883	
WOOD-D (07)	20,335	56,256	
WPBN-DT.REP (7)	199	631	1.12
Ix Free	20,136	55,625	98.88
Eaton County			
County Pop	35,517	92,879	
WOOD-D (07)	35,517	92,879	
Ix Free	35,517	92,879	100.00
Gratiot County			
County Pop	14,699	38,982	
WOOD-D (07)	4,759	12,731	
WPBN-DT.REP (7)	1,529	4,184	32.86
Ix Free	3,230	8,547	67.14
Hillsdale County			
County Pop	18,547	43,431	
WOOD-D (07)	1,170	2,968	
WPBN-DT.REP (7)	15	34	1.15
Ix Free	1,155	2,934	98.85
Ingham County			
County Pop	108,542	281,912	
WOOD-D (07)	103,645	268,027	
WPBN-DT.REP (7)	781	1,744	0.65
Ix Free	102,864	266,283	99.35
Ionia County			
County Pop	19,674	57,024	
WOOD-D (07)	19,674	57,024	
Ix Free	19,674	57,024	100.00
Isabella County			
County Pop	19,950	54,624	
WOOD-D (07)	222	592	
WPBN-DT.REP (7)	161	464	78.38
Ix Free	61	128	21.62
Jackson County			
County Pop	57,979	149,756	
WOOD-D (07)	13,429	34,594	
WPBN-DT.REP (7)	729	1,931	5.58
Ix Free	12,700	32,663	94.42
Kalamazoo County			
County Pop	88,955	223,411	
WOOD-D (07)	88,955	223,411	
Ix Free	88,955	223,411	100.00
Kent County			
County Pop	192,698	500,631	
WOOD-D (07)	192,698	500,631	
WPBN-DT.REP (7)	55	180	0.04
Ix Free	192,643	500,451	99.96
Mecosta County			
County Pop	17,274	37,308	
WOOD-D (07)	2,334	5,519	

WPBN-DT.REP (7)	1,724	4,066	73.67
Ix Free	610	1,453	26.33
Montcalm County			
County Pop	22,817	53,059	
WOOD-D (07)	22,581	52,662	
WPBN-DT.REP (7)	5,939	13,181	25.03
Ix Free	16,642	39,481	74.97
Muskegon County			
County Pop	61,962	158,983	
WOOD-D (07)	56,638	146,733	
WPBN-DT.REP (7)	9,596	24,642	16.79
Ix Free	47,042	122,091	83.21
Newaygo County			
County Pop	20,105	38,202	
WOOD-D (07)	14,389	30,161	
WPBN-DT.REP (7)	10,376	22,406	74.29
Ix Free	4,013	7,755	25.71
Oceana County			
County Pop	12,857	22,454	
WOOD-D (07)	49	147	
WPBN-DT.REP (7)	49	147	100.00
Ottawa County			
County Pop	66,624	187,768	
WOOD-D (07)	66,624	187,768	
Ix Free	66,624	187,768	100.00
St. Joseph County			
County Pop	24,242	58,913	
WOOD-D (07)	22,342	54,435	
WPBN-DT.REP (7)	3,831	9,177	16.86
Ix Free	18,511	45,258	83.14
Shiawassee County			
County Pop	25,833	69,770	
WOOD-D (07)	1,778	5,023	
WPBN-DT.REP (7)	75	184	3.66
Ix Free	1,703	4,839	96.34
Van Buren County			
County Pop	31,530	70,060	
WOOD-D (07)	31,530	70,060	
WPBN-DT.REP (7)	9	15	0.02
Ix Free	31,521	70,045	99.98

D.L. Markley & Associates, Inc. Population Report
Exhibit E-4 - Population Tabulation for 2000 Census

WOOD-D (07) Grand Rapids, MI - BLCDT20040625ABO
Broadcast Type: Digital Service: T
Lat: 42-41-14 N Lng: 085-30-34 W ERP: 30.0 kW AMSL: 530.0 m
TV Incoming Interference Study
Interference Considered Within: Noise Limited FCC Contour
Signal Resolution: 1.0 km
LR Profile Spacing Increment: 0.1 km
Consider NTSC Taboo: Yes
KWX error points are considered to
be interference free coverage.
of radials computed for contours: 72
Contours calculated using 8 radial HAAT.
Threshold for reception: 36.0
Pop Centroid DB: 2000 US Census (SF1)

Study Date: 12/19/2007
TV Database Date: 12/18/2007

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: V-Soft 30 Second US Database

Population Database: 2000 US Census (SF1)

Percentages calculated using a baseline population of 2,398,686.

Stations which cause interference:

Call Letters	H Units	Population	%	Area (sq. km)
WPBN-DT.REP (7)	48551	114276	4.764	3192.33

Masking Summary:

Call Letters	Total Interference		Unique Interference	
	Population	%	Population	%
WPBN-DT.REP (7)	114276	4.764	114276	4.764

Call Letters	City	State	Dist	Bear
WPBN-DT.REP (7)	Traverse City	MI	177.3	354.7

Totals for WOOD-D (07)

Calculation Area Population:	2,408,443	(	31505.1 sq. km)
Not Affected by Terrain Loss:	2,398,686	(	31240.4 sq. km)
Total NTSC Interference:	0	(	0.0 sq. km)
DTV Only Interference:	114,276	(	3192.3 sq. km)
Total DTV Interference:	114,276	(	3192.3 sq. km)

Interfered Population:	114,276	(3192.3 sq. km)
Interference Free:	2,284,410	(28048.1 sq. km)
Percent Interference:	4.76	
Terrain Blocked Population:	9,757	(264.7 sq. km)
Contour Area Population:	2,409,066	

Interference Free Breakdown:

White:	1,919,124	(84.0%)
Black:	166,065	(7.3%)
Hispanic:	114,191	(5.0%)
Native American:	10,625	(0.5%)
Asian:	35,742	(1.6%)
Pacific Islander:	598	(0.0%)
Mixed Race:	35,432	(1.6%)
Other:	2,633	(0.1%)
Total:	2,284,410	

	Housing Units	Population	% of County
Michigan			
Allegan County			
County Pop	43,292	105,665	
WOOD-D (07)	43,292	105,665	
Ix Free	43,292	105,665	100.00
Barry County			
County Pop	23,876	56,755	
WOOD-D (07)	23,876	56,755	
Ix Free	23,876	56,755	100.00
Berrien County			
County Pop	73,445	162,453	
WOOD-D (07)	15,454	34,401	
WPBN-DT.REP (7)	2,896	6,648	19.33
Ix Free	12,558	27,753	80.67
Branch County			
County Pop	19,822	45,787	
WOOD-D (07)	14,709	37,101	
WPBN-DT.REP (7)	1,743	4,280	11.54
Ix Free	12,966	32,821	88.46
Calhoun County			
County Pop	58,691	137,985	
WOOD-D (07)	58,691	137,985	
Ix Free	58,691	137,985	100.00
Cass County			

County Pop	23,884	51,104	
WOOD-D (07)	13,053	26,477	
WPBN-DT.REP (7)	2,769	4,879	18.43
Ix Free	10,284	21,598	81.57
Clinton County			
County Pop	24,630	64,753	
WOOD-D (07)	23,954	63,064	
WPBN-DT.REP (7)	207	645	1.02
Ix Free	23,747	62,419	98.98
Eaton County			
County Pop	42,118	103,655	
WOOD-D (07)	42,118	103,655	
Ix Free	42,118	103,655	100.00
Gratiot County			
County Pop	15,516	42,285	
WOOD-D (07)	5,145	13,107	
WPBN-DT.REP (7)	1,609	4,133	31.53
Ix Free	3,536	8,974	68.47
Hillsdale County			
County Pop	20,189	46,527	
WOOD-D (07)	1,226	3,075	
WPBN-DT.REP (7)	15	44	1.43
Ix Free	1,211	3,031	98.57
Ingham County			
County Pop	115,056	279,320	
WOOD-D (07)	109,331	264,032	
WPBN-DT.REP (7)	963	2,219	0.84
Ix Free	108,368	261,813	99.16
Ionia County			
County Pop	22,006	61,518	
WOOD-D (07)	22,006	61,518	
Ix Free	22,006	61,518	100.00
Isabella County			
County Pop	24,528	63,351	
WOOD-D (07)	227	572	
WPBN-DT.REP (7)	163	440	76.92
Ix Free	64	132	23.08
Jackson County			
County Pop	62,906	158,422	
WOOD-D (07)	15,534	39,281	
WPBN-DT.REP (7)	849	2,115	5.38
Ix Free	14,685	37,166	94.62
Kalamazoo County			
County Pop	99,250	238,603	
WOOD-D (07)	99,250	238,603	
Ix Free	99,250	238,603	100.00
Kent County			
County Pop	224,000	574,335	
WOOD-D (07)	224,000	574,335	
WPBN-DT.REP (7)	93	288	0.05
Ix Free	223,907	574,047	99.95
Mecosta County			

County Pop	19,593	40,553	
WOOD-D (07)	3,037	6,951	
WPBN-DT.REP (7)	2,215	4,942	71.10
Ix Free	822	2,009	28.90
Montcalm County			
County Pop	25,900	61,266	
WOOD-D (07)	25,718	60,870	
WPBN-DT.REP (7)	7,289	16,834	27.66
Ix Free	18,429	44,036	72.34
Muskegon County			
County Pop	68,556	170,200	
WOOD-D (07)	62,308	156,471	
WPBN-DT.REP (7)	11,771	29,536	18.88
Ix Free	50,537	126,935	81.12
Newaygo County			
County Pop	23,202	47,874	
WOOD-D (07)	16,511	37,375	
WPBN-DT.REP (7)	12,072	27,838	74.48
Ix Free	4,439	9,537	25.52
Oceana County			
County Pop	15,009	26,873	
WOOD-D (07)	44	157	
WPBN-DT.REP (7)	44	157	100.00
Ix Free	0	0	0.00
Ottawa County			
County Pop	86,856	238,314	
WOOD-D (07)	86,856	238,314	
WPBN-DT.REP (7)	0	0	0.00
Ix Free	86,856	238,314	100.00
St. Joseph County			
County Pop	26,503	62,422	
WOOD-D (07)	24,165	57,025	
WPBN-DT.REP (7)	3,759	9,044	15.86
Ix Free	20,406	47,981	84.14
Shiawassee County			
County Pop	29,087	71,687	
WOOD-D (07)	2,126	5,634	
WPBN-DT.REP (7)	90	227	4.03
Ix Free	2,036	5,407	95.97
Van Buren County			
County Pop	33,975	76,263	
WOOD-D (07)	33,975	76,263	
WPBN-DT.REP (7)	4	7	0.01
Ix Free	33,971	76,256	99.99

WPBN-D.ALLOC

Latitude: 44-46-36 N
Longitude: 085-41-02 W
ERP: 3.20 kW
Channel: 7
Frequency: 177.0 MHz
AMSL Height: 462.1 m
Elevation: 328.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: FCC Method

WPBN-D.ALREV

Latitude: 44-46-36 N
Longitude: 085-41-02 W
ERP: 0.30 kW
Channel: 7
Frequency: 177.0 MHz
AMSL Height: 462.1 m
Elevation: 328.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Method

D.L. Markley & Associates, Inc.

- WPBN-DT Current Allocation NL Contour
- WPBN-DT Non-D NL Contour

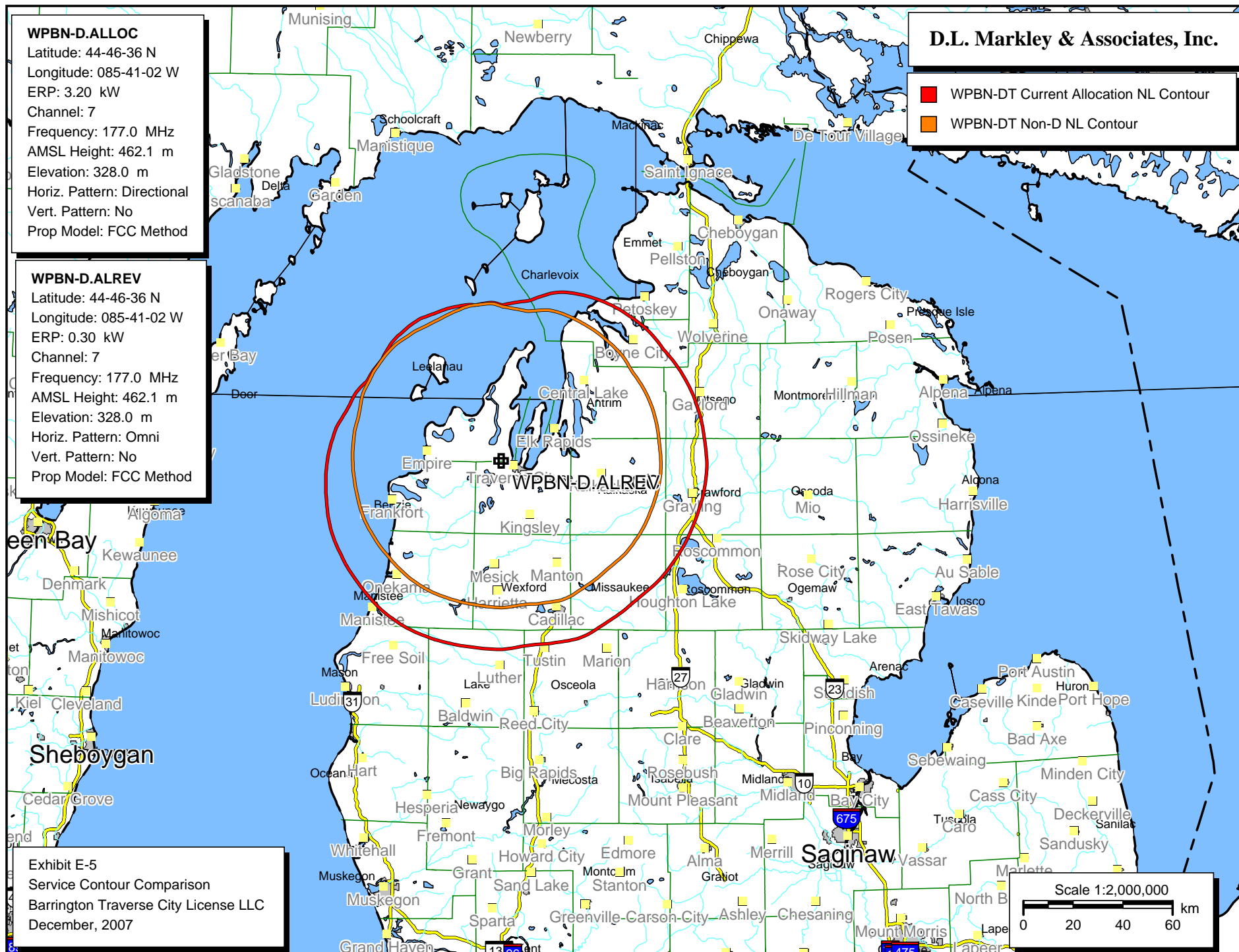


Exhibit E-5

Service Contour Comparison

Barrington Traverse City License LLC

December, 2007

Scale 1:2,000,000

0 20 40 60 km